PROPOSAL EVALUATION

Proposition 1E Integrated Regional Water Management (IRWM) Grant Program

Stormwater Flood Management Grant, Round 2, 2013

Applicant South Orange County Wastewater Authority **Amount Requested** $3,368,774

Proposal Title Sulphur and Aliso Creek Stabilization Project **Total Proposal Cost** $6,737,548

PROJECT SUMMARY

The project provides stabilization of existing banks through construction of a reinforced concrete box (RCB) culvert extension from the downstream face of the existing (3) 12'x12' RCB culvert underneath Alicia Parkway to the Aliso Creek confluence and construction of earthen low flow swale to capture low flow from upstream of the existing culvert and bypass the existing culvert through a wall-attached pipe.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	**9/15**	Technical Justification	**4/10**
Budget	**5/5**		
Schedule	**3/5**	Benefits and Cost Analysis	**12/30**
Monitoring, Assessment, and Performance Measures	**3/5**	Program Preferences	**5/10**
		Total Score (max. possible = 80)	**41**

EVALUATION SUMMARY

WORK PLAN

The criterion is less than fully addressed and rationale is insufficient. The primary goal of the project is to provide bank stabilization and reduce erosion. While the applicant demonstrates that erosion control is necessary, the project will accomplish this by paving over a substantial amount of the creek and destroying a natural habitat. As proposed, the project is unlikely to obtain the necessary permits for completion. Also, the tasks are not of adequate detail and completeness to demonstrate that the project can be implemented. For example, Task 10 Construction does not provide detailed construction action items, just bulleted lists. The category, Environmental Compliance/Mitigation/Enhancement is stated as not applicable, yet the EIR has not been started and therefore that statement cannot be supported.

BUDGET

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. The applicant provided a detailed cost break down and basis for budgeted amounts. The costs appear reasonable based on the assumptions. The budget also included a contingency cost for extended permitting duration if additional mitigation is necessary.

SCHEDULE

The criterion is less than fully addressed and rationale is insufficient. The schedule is consistent with the work plan and budget and construction is scheduled to begin in January 2015. However, the presented schedule underestimates the time to obtain necessary permits, particularly the 401 certification.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is less than fully addressed and documentation is incomplete. The identified monitoring target, "reduction in invert degradation and bank slope erosion" for the flood management goal is not measureable and will not provide a means for monitoring project performance. Also, the pollutants to be monitored for the improve water quality goal are not documented, making the appropriateness of tools and methods difficult to determine.

TECHNICAL JUSTIFICATION

The technical justification cannot be determined due to lack of documentation and poorly described physical benefits. The applicant did not appropriately quantify the benefits being claimed for flood management. The applicant claims a flood management benefit of 4,910 cubic feet per second (cfs) by claiming a without project flow rate of 0 cfs. An increase in channel capacity is a project outcome, but not a physical benefit. A more appropriate physical benefit for flood management is an estimated reduction in flood damages (e.g., reduction in acreage flooded, reduction in structures inundated, etc.). Water quality benefits are also not appropriately quantified. Rather than providing an estimated reduction in constituent concentration, the applicant provided an estimated flow rate through the low flow bio-swale.

BENEFITS AND COST ANALYSIS

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

The net present value (NPV) of costs is $5.8 million. Event damages are calculated for 1 in 10 year, 1 in 25 year, 1 in 50 year, and 1 in 100 year events. Most event damages are fines that would be imposed if sewerage lines broke. Fines are not generally equivalent to economic costs. Failure probabilities in Table 11 are interpreted as the probability that all repair costs and fines would be incurred. Estimated annual damage (EAD) is $84,166 or $1.33 million in NPV terms.

Recreation benefits are monetized. It is assumed that recreation would increase by 1.5 percent or 21,600 persons annually due to "the increase in water quality created." The assumed increase in attendance is not well-documented. This recreation is valued at $21.35 per day. Since most of the claimed economic benefits result from water quality improvement, the analysis should develop and provide measures of water quality improvement that can be used with existing economic models.

Non-monetary benefits are well-documented in Table 13. These benefits are enough to contribute to a medium level of benefits.

PROGRAM PREFERENCES

Applicant claims that 6 program preferences and 8 statewide priorities will be met with project implementation. However, applicant demonstrates this with a high degree of certainty, and adequately documents the magnitude and breadth to which each will be achieved for only 5 of the preferences claimed. The proposal will achieve the following: (1) Include regional projects or programs; (2) Effectively integrate water management programs and projects within hydrologic region identified in the CWP; RWQCB region or subdivision; or other region or sub-region specifically identified by DWR; (3) Use and Reuse Water More Efficiently; (4) Practice Integrated Flood Management; (5) Protect Surface Water and Ground Quality.